

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for deploying a computer application on a network for execution by at least one of a plurality of machines that are connected to said network, comprising the steps of:

~~_____ installing an application on a local file system of an application server to define a locally installed application; and~~

~~_____ relocating said locally installed application onto a shared file system by the steps of:~~

~~_____ identifying shareable files among files of said application, said shareable files being shareable among multiple instances of said application;~~

~~_____ moving said shareable files from said locally installed application to said shared file system to define relocated files; and~~

~~_____ establishing symbolic links on said application server that are directed to corresponding locations of said relocated files~~

_____ installing an application on a local file system of exactly one of said machines;

identifying functionally read-only files and read-write files of said application;

moving said functionally read-only files from said local file system of said one machine to a server of a shared file system that is accessible to said machines via said network to define relocated files;

copying said read-write files to local file systems of others of said machines; and

establishing symbolic links to said relocated files, on said machines.

2. (Currently amended) The method according to claim 1, ~~wherein said step of relocating said locally installed application further comprises~~ comprising the steps of:

identifying instance read/write files among said files of said application; and

establishing said instance read/write files in at least one subtree of said local file systems system.

3. (Currently amended) The method according to claim 1, further comprising the steps of:

initializing a cache in said application server; and

executing a configuration script following
performance of said steps of installing an application ~~and~~
~~relocating said locally installed application.~~

4. (Currently amended) ~~The method according to~~
~~claim 1,~~ A method for deploying a computer application on a
network, comprising the steps of:

installing an application on a local file system of
a server to define a locally installed application; and

relocating said locally installed application onto a
shared file system by the steps of:

identifying shareable files among files of said
application, said shareable files being shareable among
multiple instances of said application;

moving said shareable files from said locally
installed application to said shared file system to define
relocated files; and

establishing symbolic links on said server that are
directed to corresponding locations of said relocated files;

wherein said step of relocating said locally
installed application further comprises associating at least
one application file element with a 4-tuple, wherein:

a first value ~~SharedDir~~ of said 4-tuple specifies a
root directory in said shared file system;

a second value ~~LocalDir~~ of said 4-tuple specifies a first subdirectory in said local file system;

a ~~third value~~ policy of said 4-tuple specifies a file creation policy that applies to said local file system;
and

a fourth value ~~script~~ is a reference to a configuration script.

5. (Currently amended) The method according to claim 4, wherein said third value ~~policy~~ specifies a step of creating said first subdirectory in said local file system.

6. (Original) The method according to claim 4, wherein said file creation policy specifies a step of creating a first symbolic link in said local file system to a remote file.

7. (Original) The method according to claim 4, wherein said file creation policy specifies creating in said local file system a first symbolic link to a remote subdirectory and a second symbolic link to a remote file.

8. (Original) The method according to claim 4, further comprising the step of modifying at least one of said

files of said application by executing said configuration script.

9. (Original) The method according to claim 4, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies the step of creating one of said symbolic links.

10. (Original) The method according to claim 4, wherein said step of relocating said locally installed application further comprises the step of:

in a second event that said file creation policy specifies an exclusive creation of subdirectories, creating said first subdirectory in said local file system.

11. (Original) The method according to claim 10, wherein said step of creating said first subdirectory comprises adding said first subdirectory to a set of subdirectories to be created.

12. (Original) The method according to claim 4, wherein said application file element comprises said root directory.

13. (Original) The method according to claim 12, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

14. (Original) The method according to claim 13, wherein said step of relocating said locally installed application is performed by recursively mapping a subtree of said local file system onto said shared file system.

15. (Currently amended) The method according to claim 13, wherein at least a portion of said application file elements of said root directory are substituted for said first value ~~SharedDir~~ and said second value ~~LocalDir~~ of said 4-tuple.

16. (Original) The method according to claim 4, further comprising the step of executing said configuration script.

17. (Original) The method according to claim 4, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies creation of said symbolic links, creating one of said symbolic links; and

in a second event that said file creation policy specifies exclusive creation of subdirectories, creating said first subdirectory in said local file system.

18. (Original) The method according to claim 17, wherein said step of creating said subdirectory comprises adding said first subdirectory to a set of subdirectories to be created.

19. (Original) The method according to claim 17, wherein said application file element comprises said root directory.

20. (Original) The method according to claim 19, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

21. (Original) The method according to claim 20, wherein said step of relocating said locally installed application is performed by recursively mapping a subtree of said local file system onto said shared file system.

22. (Currently amended) The method according to claim 20, wherein at least a portion of said application file elements of said root directory are substituted for said first value ~~SharedDir~~ and said second value ~~LocalDir~~ of said 4-tuple.

23. (Withdrawn) A method for deploying a computer application on a network, comprising the steps of:

selecting an application server of a cluster for application priming thereof;

installing an application on a local file system of said application server according to an installation procedure of an installation management node of said cluster to define a locally installed application;

relocating said locally installed application onto a shared file system, wherein said shared file system mirrors an application directory of said installation management node, by the steps of:

identifying files of said application as functionally read-only files, instance read/write files, and application read/write files;

moving said functionally read-only files from said locally installed application to said shared file system to define relocated functionally read-only files;

moving said application read/write files from said locally installed application to said shared file system to define relocated application read/write files;

automatically establishing said instance read/write files in at least one subtree of said local file system; and

automatically establishing symbolic links on said application server that are directed to corresponding locations of said relocated functionally read-only files and said relocated application read/write files.

24. (Withdrawn) The method according to claim 23, wherein said relocated functionally read-only files comprise a configuration file.

25. (Withdrawn) The method according to claim 23, wherein said step of identifying said files of said application is performed off-line.

26. (Withdrawn) The method according to claim 23, wherein said steps of selecting an application server, installing said application, and relocating said application are performed using a data management process and a daemon, wherein said daemon executes on said application server.

27. (Withdrawn) The method according to claim 26, wherein said application server comprises a plurality of application servers that receive a multicast, said multicast being initiated by said data management process while at least one of said steps of selecting an application server, installing said application, and relocating said application is being performed.

28. (Withdrawn) The method according to claim 23, wherein said step of relocating said locally installed application further comprises mapping a 4-tuple, wherein:

a first value SharedDir of said 4-tuple specifies a root directory in said shared file system;

a second value LocalDir of said 4-tuple specifies a first subdirectory in said local file system;

a third value policy of said 4-tuple specifies a file creation policy that applies to said local file system;
and

a fourth value script is a reference to a configuration script.

29. (Withdrawn) The method according to claim 28, wherein said file creation policy specifies a step of creating said first subdirectory in said local file system.

30. (Withdrawn) The method according to claim 28, wherein said file creation policy specifies a step of creating a first symbolic link in said local file system to a remote file.

31. (Withdrawn) The method according to claim 28, wherein said file creation policy specifies creating in said local file system a first symbolic link to a remote subdirectory and a second symbolic link to a remote file.

32. (Withdrawn) The method according to claim 28, wherein said configuration script modifies said files of said application, wherein said files of said application are located on said local file system.

33. (Currently amended) A computer software product, comprising a computer-readable medium in which computer

program instructions are stored, wherein said instructions, when read by a computer, cause the computer to deploy an application on a network for execution by at least one of a plurality of machines that are connected to said network, by executing the steps of:

~~installing an application on a local file system of an application server to define a locally installed application; and~~

~~relocating said locally installed application onto a shared file system by the steps of:~~

~~identifying shareable files among files of said application, said shareable files being shareable among multiple instances of said application;~~

~~moving said shareable files from said locally installed application to said shared file system to define relocated files; and~~

~~establishing symbolic links on said application server that are directed to corresponding locations of said relocated files~~

installing an application on a local file system of exactly one of said machines;

identifying functionally read-only files and read-write files of said application;

moving said functionally read-only files from said local file system of said one machine to a server of a shared file system that is accessible to said machines via said network to define relocated files;

copying said read-write files to local file systems of others of said machines; and

establishing symbolic links to said relocated files, on said machines.

34. (Currently amended) The computer software product according to claim 33, ~~wherein said step of relocating said locally installed application further comprises~~ wherein said computer is further instructed to perform the steps of:

identifying instance read/write files among said files of said application; and

establishing said instance read/write files in at least one subtree of said local file systems system.

35. (Currently amended) The computer software product according to claim 33, wherein said computer is further instructed to perform ~~further comprising the step of~~ executing a configuration script following performance of said ~~step~~ steps of installing an application and ~~relocating said locally installed application.~~

36. (Currently amended) ~~The computer software product according to claim 33,~~ A computer software product, comprising a computer-readable medium in which computer program instructions are stored, wherein said instructions, when read by a computer, cause the computer to deploy an application on a network by executing the steps of:

installing an application on a local file system of a server to define a locally installed application; and

relocating said locally installed application onto a shared file system by the steps of:

identifying shareable files among files of said application, said shareable files being shareable among multiple instances of said application;

moving said shareable files from said locally installed application to said shared file system to define relocated files; and

establishing symbolic links on said server that are directed to corresponding locations of said relocated files,

wherein said step of relocating said locally installed application further comprises associating at least one application file element with a 4-tuple, wherein:

a first value ~~SharedDir~~ of said 4-tuple specifies a root directory in said shared file system;

a second value ~~LocalDir~~ of said 4-tuple specifies a first subdirectory in said local file system;

a third value ~~policy~~ of said 4-tuple specifies a file creation policy that applies to said local file system;
and

a fourth value ~~script~~ is an optional reference to a configuration script.

37. (Original) The computer software product according to claim 36, wherein said file creation policy specifies a step of creating said first subdirectory in said local file system.

38. (Original) The computer software product according to claim 36, wherein said file creation policy specifies a step of creating a first symbolic link in said local file system to a remote file.

39. (Original) The computer software product according to claim 36, wherein said file creation policy specifies creating in said local file system a first symbolic link to a remote subdirectory and a second symbolic link to a remote file.

40. (Original) The computer software product according to claim 36, further comprising the step of modifying at least one of said files of said application by executing said configuration script.

41. (Original) The computer software product according to claim 36, further comprising the step of modifying at least one system file by executing said configuration script.

42. (Original) The computer software product according to claim 36, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies creation of said symbolic links, creating one of said symbolic links.

43. (Original) The computer software product according to claim 36, wherein said step of relocating said locally installed application is performed by:

in a second event that said file creation policy specifies exclusive creation of subdirectories, creating said first subdirectory in said local file system.

44. (Original) The computer software product according to claim 43, wherein said step of creating said first subdirectory comprises adding said first subdirectory to a set of subdirectories to be created.

45. (Original) The computer software product according to claim 36, wherein said application file element comprises said root directory.

46. (Original) The computer software product according to claim 45, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

47. (Original) The computer software product according to claim 46, wherein said step of relocating said locally installed application is performed by recursively mapping a subtree of said local file system onto said shared file system.

48. (Currently amended) The computer software product according to claim 46, wherein during said step of relocating said locally installed application at least a

portion of said application file elements of said root directory are substituted for said first value ~~SharedDir~~ and said second value ~~LocalDir~~ of said 4-tuple.

49. (Original) The computer software product according to claim 36, further comprising the step of executing said configuration script.

50. (Original) The computer software product according to claim 36, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies creation of said symbolic links, creating one of said symbolic links; and

in a second event that said file creation policy specifies exclusive creation of subdirectories, creating said first subdirectory in said local file system.

51. (Original) The computer software product according to claim 50, wherein said step of creating said first subdirectory comprises adding said first subdirectory to a set of subdirectories to be created.

52. (Original) The computer software product according to claim 50, wherein said application file element comprises said root directory.

53. (Original) The computer software product according to claim 52, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

54. (Original) The computer software product according to claim 53, wherein said step of relocating said locally installed application is performed by recursively mapping a subtree of said local file system onto said shared file system.

55. (Currently amended) The computer software product according to claim 53, wherein at least a portion of said application file elements of said root directory are substituted for said first value ~~SharedDir~~ and said second value ~~LocalDir~~ of said 4-tuple.

56. (Withdrawn) A computer software product, comprising a computer-readable medium in which computer

program instructions are stored, wherein said instructions, when read by a computer, cause the computer to deploy an application on a network by executing the steps of:

selecting an application server of a cluster for application priming thereof;

installing an application on a local file system of said application server according to an installation procedure of an installation management node of said cluster to define a locally installed application;

relocating said locally installed application onto a shared file system, wherein said shared file system mirrors an application directory of said installation management node, and said step of relocating said locally installed application is performed by:

identifying files of said application as functionally read-only files, instance read/write files, and application read/write files;

moving said functionally read-only files from said locally installed application to said shared file system to define relocated functionally read-only files;

moving said application read/write files from said locally installed application to said shared file system to define relocated application read/write files;

automatically establishing said instance read/write files in at least one subtree of said local file system; and
automatically establishing symbolic links on said application server that are directed to corresponding locations of said relocated functionally read-only files and said relocated application read/write files.

57. (Withdrawn) The computer software product according to claim 56, wherein said relocated functionally read-only files comprise a configuration file.

58. (Withdrawn) The computer software product according to claim 56, wherein said step of identifying files of said application is performed off-line.

59. (Withdrawn) The computer software product according to claim 56, wherein said steps of selecting an application server, installing an application, and relocating said locally installed application are performed using a data management process and a daemon, wherein said daemon executes on said application server.

60. (Withdrawn) The computer software product according to claim 59, wherein said application server

comprises a plurality of application servers that receive a multicast, said multicast being initiated by said data management process while at least one of said steps of selecting an application server, installing an application, and relocating said locally installed application is being performed.

61. (Withdrawn) The computer software product according to claim 56, wherein said step of relocating said locally installed application further comprises mapping a 4-tuple, wherein:

a first value SharedDir of said 4-tuple specifies a root directory in said shared file system;

a second value LocalDir of said 4-tuple specifies a first subdirectory in said local file system;

a third value policy of said 4-tuple specifies a file creation policy that applies to said local file system;
and

a fourth value script is a reference to a configuration script.

62. (Withdrawn) The computer software product according to claim 61, wherein said file creation policy

specifies a step of creating said first subdirectory in said local file system.

63. (Withdrawn) The computer software product according to claim 61, wherein said file creation policy specifies a step of creating a first symbolic link in said local file system to a remote file.

64. (Withdrawn) The computer software product according to claim 61, wherein said file creation policy specifies creating in said local file system a first symbolic link to a remote subdirectory and a second symbolic link to a remote file.

65. (Withdrawn) The computer software product according to claim 61, wherein said configuration script modifies said files of said application, wherein said files of said application are located on said local file system.

66. (Currently amended) A computer system comprising:

a computer having computer program instructions stored therein, wherein said instructions, when read by said computer, cause said computer to deploy an application on a

network for execution by a at least one of a plurality of machines that are connected to said network by executing the steps of:

~~installing an application on a local file system of an application server to define a locally installed application; and~~

~~relocating said locally installed application onto a shared file system by the steps of:~~

~~identifying shareable files among files of said application, said shareable files being shareable among multiple instances of said application;~~

~~moving said shareable files from said locally installed application to said shared file system to define relocated files; and~~

~~establishing symbolic links on said application server that are directed to corresponding locations of said relocated files~~

installing an application on a local file system of exactly one of said machines;

identifying functionally read-only files and read-write files of said application;

moving said functionally read-only files from said local file system of said one machine to a server of a shared

file system that is accessible to said machines via said
network to define relocated files;

copying said read-write files to local file systems
of others of said machines; and

establishing symbolic links to said relocated files,
on said machines.

67. (Currently amended) The computer system
according to claim 66, ~~wherein said step of relocating said
locally installed application further comprises wherein said~~
computer is further instructed to perform the steps of:

identifying instance read/write files ~~among said~~
~~files~~ of said application; and

establishing said instance read/write files in at
least one subtree of said local file systems ~~system~~.

68. (Currently amended) The computer system
according to claim 66, further comprising the steps of:

initializing a cache in said ~~application~~ server; and
executing a configuration script following
performance of said step ~~steps~~ of installing an application
~~and relocating said locally installed application.~~

69. (Currently amended) ~~The computer system~~
~~according to claim 66,~~ A computer system comprising:

a computer having computer program instructions
stored therein, wherein said instructions, when read by said
computer, cause said computer to deploy an application on a
network by executing the steps of:

installing an application on a local file system of
a server to define a locally installed application; and

relocating said locally installed application onto a
shared file system by the steps of:

identifying shareable files among files of said
application, said shareable files being shareable among
multiple instances of said application;

moving said shareable files from said locally
installed application to said shared file system to define
relocated files; and

establishing symbolic links on said server that are
directed to corresponding locations of said relocated files,

wherein said step of relocating said locally
installed application further comprises associating at least
one application file element with a 4-tuple, wherein:

a first value ~~SharedDir~~ of said 4-tuple specifies a
root directory in said shared file system;

a second value ~~LocalDir~~ of said 4-tuple specifies a first subdirectory in said local file system;

a third value ~~policy~~ of said 4-tuple specifies a file creation policy that applies to said local file system;
and

a fourth value ~~script~~ is a reference to a configuration script.

70. (Original) The computer system according to claim 69, wherein said file creation policy specifies a step of creating said first subdirectory in said local file system.

71. (Original) The computer system according to claim 69, wherein said file creation policy specifies a step of creating a first symbolic link in said local file system to a remote file.

72. (Original) The computer system according to claim 69, wherein said file creation policy specifies creating in said local file system a first symbolic link to a remote subdirectory and a second symbolic link to a remote file.

73. (Original) The computer system according to claim 69, wherein said configuration script modifies at least

one of said files of said application, wherein said files of said application are located on said local file system.

74. (Original) The computer system according to claim 69, wherein said configuration script modifies at least one of said files of said application.

75. (Original) The computer system according to claim 69, wherein said configuration script modifies at least one system file.

76. (Original) The computer system according to claim 69, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies creation of said symbolic links, creating one of said symbolic links.

77. (Original) The computer system according to claim 69, wherein said step of relocating said locally installed application is performed by:

in a second event that said file creation policy specifies exclusive creation of subdirectories, creating said first subdirectory in said local file system.

78. (Original) The computer system according to claim 77, wherein said step of creating said first subdirectory comprises adding said first subdirectory to a set of subdirectories to be created.

79. (Original) The computer system according to claim 69, wherein said application file element comprises said root directory.

80. (Original) The computer system according to claim 79, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

81. (Original) The computer system according to claim 80, wherein said step of relocating said locally installed application is performed by recursively mapping a subtree of said local file system onto said shared file system.

82. (Currently amended) The computer system according to claim 80, wherein during said step of relocating

said locally installed application at least a portion of said application file elements of said root directory are substituted for said first value ~~SharedDir~~ and said second value ~~LocalDir~~ of said 4-tuple.

83. (Original) The computer system according to claim 69, further comprising the step of executing said configuration script.

84. (Original) The computer system according to claim 69, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies creation of said symbolic links, creating one of said symbolic links; and

in a second event that said file creation policy specifies exclusive creation of subdirectories, creating said first subdirectory in said local file system.

85. (Original) The computer system according to claim 84, wherein said step of creating said first subdirectory comprises adding said first subdirectory to a set of subdirectories to be created.

86. (Original) The computer system according to claim 84, wherein said application file element comprises said root directory.

87. (Original) The computer system according to claim 86, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

88. (Original) The computer system according to claim 87, wherein said step of relocating said locally installed application is performed by recursively mapping a subtree of said local file system onto said shared file system.

89. (Currently amended) The computer system according to claim 87, wherein at least a portion of said application file elements of said root directory are substituted for said first value ~~SharedDir~~ and said second value ~~LocalDir~~ of said 4-tuple.